

Group A, 3 patients experienced grade 0-2 rectal toxicity (diarrhoea and tenesmus), while 4 patients in Group B experienced these symptoms. For both groups, grade 2 urinary toxicity occurred in one patient. No significant differences have been observed for complications or recovery of urinary continence.

**Conclusion:** IORT during RP is a feasible and safe procedure, with a similar complication rate compared to RP and ART. Therefore IORT can be proposed as a treatment choice for patients with locally advanced PCa. Longer follow-up is needed to assess long-term toxicity and local tumour control with IORT.

Table I.

	Group a (N: 45)	Group B (N: 50)	p-Value
Neoadjuvant therapy	6/45 (13%)	6/50 (12%)	ns
Mean age (years)	67.4 (56-75)	66.8 (48-75)	ns
Clinical stage	3T1c-1T2b-2T2c- 19T3a-20T3b	3T2a-6T2b-5T2c- 25T3a-7T3b	ns
Mean PSA at diagnosis	27.26 ng/ml (2.03-63.9)	27.5 ng/ml (6.9-169)	ns
Bioptic GS	7.73 (4-9)	7.8 (5-9)	ns
Mean operative time (min)	237	185	<0.0001
Mean hospital stay (days)	4.5	4.5	ns
pT2	3pT2a-3pT2b- 9pT2c	2pT2b-	<0.0001
pT3a	5/45	21/50	<0.0001
pT3b	20/45	19/50	ns
pT4	5/45	8/50	ns
Mean GS	8.1 (6-10)	7.64 (5-10)	ns
Positive margins	26/45 (57 %)	30/50 (60%)	ns
Anastomosis structure	4/45 (8%)	8/50 (16%)	<0.0001

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#### RADICAL PROSTATECTOMY FOR PATIENTS WITH CLINICALLY LOCALLY ADVANCED PROSTATE CANCER: SURVIVAL ANALYSIS AND ONCOLOGICAL OUTCOME

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**Aim:** To report the outcomes of a single institutional study on 98 patients with clinically locally advanced prostate cancer (Pca) and prostate-specific antigen (PSA)  $\geq 20$  ng/ml who underwent radical prostatectomy (RP) and pelvic lymphadenectomy (PNLD).

**Patients and Methods:** We performed a retrospective review of PCa patients who had initial PSA values above 20 ng/ml and were treated with RP between 1999 and 2005. Biochemical recurrence was defined as a double rise in PSA levels over 0.2 ng/ml after RP. Adjuvant or salvage radiotherapy (RT) or hormonal therapy (HT) were indicated according to institutional protocols. Overall (OS), cancer-specific (CSS), clinical progression-free (CPFS), and biochemical progression-free survival (BRFS) were calculated for the entire cohort and select subgroups using the Kaplan-Meier method with log-rank test and Cox multivariate analysis.

**Results:** The mean patient age was 66 (range IQR 61,8-71) years. Mean PSA was 30.4 (range IQR 24.4-45) ng/ml. PCa was clinically locally advanced in 59% of cases. At pathology, locally advanced disease was found in 72.4% of cases (27.6% pT3a, 30.6% pT3b, and 14.3% pT4). Positive surgical margins and lymph node involvement were observed in 68% and 23% of cases respectively. Mean follow-up was 65.3 (range IQR 46.0-96.5) months. Adjuvant RT and HT were administered in 51% and 69% of patients. OS, CSS and BRFS at 5 and 10 years were 85% (55%), 93% (71%) and 53% (36%), respectively. We did not find any significant predictor for OS, CSS and CPFS. Gleason score at biopsy, but not PSA, was strongly associated with a worse CSS. Interestingly, we observed that only pathological stage, seminal vesicle invasion and PSA at diagnosis were independent predictors of BRFS.

**Conclusion:** RP is an effective first step in a multimodality approach for locally advanced PCa, with

convincing cancer-related outcomes. Patients with PSA  $\geq 20$  ng/ml should be considered for an aggressive approach, starting with radical surgery. Most patients need adjuvant HT or RT. This study confirms that RP should be considered as the first step in a multimodality approach for clinically locally advanced PCa.

#### References

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- 2 Gontero P, Marchioro G, Frea B *et al*: Is radical prostatectomy feasible in all cases of locally advanced non-bone metastatic prostate cancer? Results of a single-institution study. *Eur Urol* 51: 922-930, 2007.
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### DO PATIENTS TREATED WITH RADICAL PROSTATECTOMY FOR LOCALLY ADVANCED PROSTATE CANCER AND PSA >50 ng/ml HAVE A WORSE PROGNOSIS THAN PATIENTS WITH PSA>20 ng/ml?

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**Aim:** To report the outcomes of a single institutional study on 98 pts with clinically locally advanced prostate cancer (PCa) and prostate-specific antigen (PSA)  $\geq 20$  ng/ml who underwent radical prostatectomy (RP) and pelvic lymphadenectomy (PNLD).

**Patients and Methods:** We performed a retrospective review of PCa patients who had initial PSA values above 20 ng/ml (Group A), treated with RP between 1999 and 2005. Overall (OS), cancer specific (CSS), clinical progression free (CPFS), and biochemical recurrence free survival (BRFS) of these patients were compared with those of other patients who had initial PSA values above 50 ng/ml (Group B). Biochemical recurrence was defined

as a double rise in PSA levels over 0.2 ng/ml after RP. Adjuvant or salvage radiotherapy (RT) or hormonal therapy (HT) were indicated according to institutional protocols. OS, CSS, CPFS and BRFS were calculated for the entire cohort and select subGroups using the Kaplan-Meier method with log-rank test and Cox multivariate analysis.

**Results:** The mean age was 66 (range IQR 61.8-71) years, with no significant differences between Group A and B. Mean PSA was 30.4 (range IQR 24.4-45) ng/ml. No differences between the two groups were observed for pathological stage, positive surgical margins and lymph node involvement. Mean pathological Gleason score was significantly higher for Group B ( $p=0.005$ ). Mean follow-up was 65.3 (range IQR 46.0-96.5) months. Table I describes OS, CSS and BRFS at 5 and 10 years for Group A and B. Only BRFS was significantly higher for Group A vs. Group B.

Table I.

	Group A		Group B		p-Value
	5-Year survival	10-Year survival	5-Year survival	10-Year survival	
OS	86%	71%	83%	63%	0.65
CSS	92%	92%	89%	79%	0.67
BRFS	63%	58%	20%	20%	0.012

OS, overall survival; CSS, cancer specific survival; BRFS, biochemical recurrence-free survival.

**Conclusion:** RP provided good results in cT3-4 disease. PSA value at diagnosis in our series could not discriminate OSS and CSS, while BRFS was lower for patients with a PSA above 50 ng/ml. This study confirms that RP should be considered as the first step in a multimodality approach for locally advanced PC independently on PSA value at diagnosis.

#### References

- 1 Van Poppel H and Joniau S: An analysis of radical prostatectomy in advanced stage and high-grade prostate cancer. *Eur Urol* 53: 253-259, 2008.
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